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December 17, 2001

Commissioner for Patents
Washington, D.C. 20231

Certificate of Mailing under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope, with sufficient postage, addressed to, Commissioner for Patents, Washington, D.C. 20231 on December 17, 2001

Paula Albelda Nudelman
Signature

Paula Albelda Nudelman
Typed or printed name of person signing certificate

Re: Inventors: Sivananda K. Kanakasabapathy and Lawrence J. Overzet
Patent Application Entitled: ION-ION PLASMA PROCESSING WITH BIAS MODULATION
SYNCHRONIZED TO TIME-MODULATED DISCHARGES
Serial No.: 09/820,244
Filing Date: March 28, 2001
Our File No.: 119941-1089

Dear Sir:

Enclosed for filing in connection with the above-referenced patent application are the following documents:

1. Information Disclosure Statement (2 pp.);
2. Form PTO 1449 with twenty-five (25) references; and
3. Return postcard.

Please file the above-referenced documents and return the date-stamped postcard to our office at the above address. It is believed that no additional fees are due. If this is incorrect, the Commissioner is hereby authorized to charge any fees due which may be required by this paper to Deposit Account No. 07-0153.

In the meantime, if you have any questions or comments concerning any of the above, please call the undersigned at your convenience. Otherwise, please accept the enclosed.

Respectfully submitted,
Gardere Wynne Sewell LLP

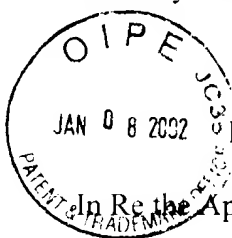
Edwin S. Flores

Edwin S. Flores
Registration No. 38,453

ESF:pan:1087434.1

Enclosures

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:

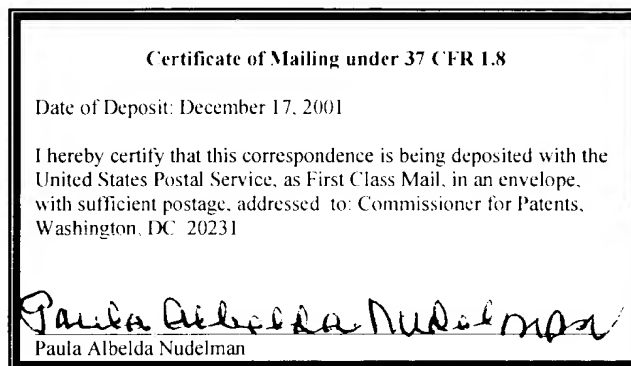
SIVANANDA K. KANAKASABAPATHY and LAWRENCE J. OVERZET

Serial No.: 09/820,2446

Art Unit: 1765

Examiner: Not Yet Known

Filed: March 28, 2001



For: ION-ION PLASMA PROCESSING WITH BIAS MODULATION
SYNCHRONIZED TO TIME-MODULATED DISCHARGES

Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the prior art listed on the attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed prior art required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R §§ 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

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The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.18 be deemed necessary, the Commissioner is hereby authorized to deduct said fees from Gardere Wynne Sewell LLP, Deposit Account No. 07-0153.

Applicants respectfully request that the listed prior art be made of record in the present case.

Respectfully submitted,

GARDERE WYNNE SEWELL LLP



Edwin S. Flores

Registration No. 38,453

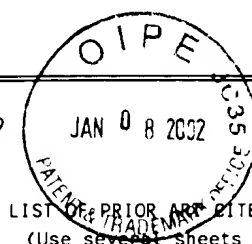
Attorney for Applicants

Dated: December 17, 2001

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FORM PTO-1449
(REV. 7.80)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.119941-1089

SERIAL NO.: 09/820,2446

APPLICANT:Kanakasbapathy, et al.

FILING DATE: March 28, 2001

GROUP: 1765

U. S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (if appropriate)
	4,747,922	5/31/88	Sharp	204	192.11	3/25/86
	4,963,239	10/16/90	Shimamura et al.	204	192.12	1/26/89
	5,423,915	06/13/95	Murata, et al.	118	723	09/28/93
	5,435,886	07/25/95	Fujiwara, et al.	156	643	05/23/94
	5,436,172	07/25/95	Mostehi	437	8	05/28/91
	5,453,305	09/26/95	Lee	427	562	09/02/93
	5,467,013	11/14/95	Williams, et al.	324	127	12/07/93
	5,472,561	12/05/95	Williams, et al.	156	627	03/27/95
	5,510,011	4/23/96	Okamura et al.	204	192.3	12/22/94
	5,540,824	07/30/96	Yin et al.	156	345	07/18/94
	5,554,853	09/10/96	Rose	250	492	03/10/95
	5,558,718	09/24/96	Leung	118	723	04/08/94
	5,580,419	12/03/96	Berenz	156	628	02/23/94
	5,580,429	12/03/96	Chan, et al.	204	192	06/07/95
	5,607,509	03/04/97	Schumacher, et al.	118	723	04/22/96
	5,619,103	04/08/97	Tobin, et al.	315	111	06/07/95
	5,650,032	07/22/97	Keller, et al.	156	345	06/06/95
	5,683,548	11/04/97	Hartig, et al.	156	643	02/22/96

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

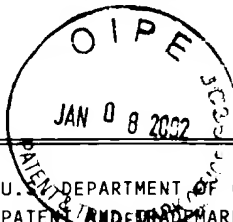
(CONTINUED ON PAGE TWO)

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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FORM PTO-1449 (REV. 7.80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary)		ATTY. DOCKET NO. 119941-1089		SERIAL NO. 09/820,2446	
				APPLICANT: Kanakasbapathy, et al.T			
				FILING DATE: March 28, 2001		GROUP: 1765	
U. S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (If Approp.)
		5,728,261	3/17/98	Wolfe et al.	156	662.1	5/26/95
		5,868,897	2/9/99	Ohkawa	156	345	9/18/96
		5,968,377	10/19/99	Yuasa et al.	219	121.41	5/22/97
		5,983,828	11/16/99	Savas	118	723 I	10/8/96
		5,783,102	07/21/98	Keller	216	68	02/05/96
		5,846,375	12/08/98	Gilchrist, et al.	156	345	09/26/96
		6,028,285	02/22/00	Khater, et al.	219	121	11/19/97
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
	Kanakasabapathy, Sivananda K., Overzet, Lawrence J., and Midha, Vikas and Economou, Demetre Alternating Fluxes of Positive and Negative Ions from Ion-Ion Plasma, University of Texas at Dallas, and University of Houston, 2000, pp1-8 and figures 1-3						
	Koromogawa, Takashi, Fujii, Takashi, Yamashita, Akihito, Horiike, Yasuhiro, and Shindo, Haruo, Negative Ion Assisted Silicon Oxidation in Downstream of Microwave Plasma, Tokai University, Hiratsuka, Japan and Toyo University, Kawagoe, Japan, 1998 Publication Board, Japanese Journal of Applied Physics, Part 1, No. 9A, September 1998, Jpn. J. Appl. Phys. Vol. 37 (1998) pp5028-5032						
	Samukawa, Seiji, Highly Selective and Highly Anisotropic SiO ₂ Etching in Pulse-Time Modulated Electron Cyclotron Resonance Plasma, NEC Corporation, Ibaraki, Japan, Part 1, No. 4B, April 1994, Jpn. J. Appl. Phys. Vol. 33 (1994) pp2133-2138						
	Ohtake, Hiroto and Samukawa, Seiji, Charge-free etching process using positive and negative ions in pulse-time modulated electron cyclotron resonance plasma with low-frequency bias, NEC Corporation, Ibaraki, Japan Appl. Phys. Lett. 68 (17), 22 April 1996, pp2416-2417						
	Ahn, Tae Hyuk, Nakamura, Keiji and Sugai, Hideo, A New Technology for Negative Ion Detection and the Rapid Electron Cooling in a Pulsed High-Density Etching Plasma, Nagoya University, Nagoya, Japan, Part 2, No. 10B, 15 October 1995, Jpn. J. Appl. Phys. Vol. 34 (1995) pp L1405-L1408						
	Hashimoto, Koichi, Hikosaka, Yukinobu, Hasegawa, Akihiro and Nakamura, Moritaka, Reduction of Electron Shading Damage Using Synchronous Bias in Pulsed Plasma, Fujitsu Limited, Kawasaki, Japan, Part 1, No. 6A, June 1996, Jpn. Appl. Phys. Vol. 35 (1996) pp3363-3368						
	Overzet, L.J. and Luo, L., Negative and positive ions from radio frequency plasmas in boron trichloride, University of Texas at Dallas, Appl. Phys. Lett. 59 (2), 8 July 1991, pp161-163						
	Samukawa, Seiji and Terada, Kazuo, Pulse-time modulated electron cyclotron resonance plasma etching for highly selective, highly anisotropic, and less-charging polycrystalline silicon patterning, NEC Corporation, Ibaraki, Japan, J. Vac. Sci. technol. B 12(6), Nov/Dec 1994, pp3300-3305						
	Samukawa, Seji, Pulse-time modulated electron cyclotron resonance plasma etching with low radio-frequency substrate bias, NEC Corporation, Ibaraki, Japan, Appl. Phys. Lett., Vol. 68, No. 3, 15 January 1996, pp316-318						
	Overzet, L.J., Beberman, J.H. and Verdeyen, J.T., Enhancement of negative ion flux to surfaces from radio-frequency processing discharges, University of Illinois, J. Appl. Phys. 66 (4), 15 August 1989, pp1622-1631						
EXAMINER:				DATE CONSIDERED			
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